To install mysql in linux –

1) sudo apt update && sudo apt upgrade -y

When you run sudo apt update && sudo apt upgrade -y, your system will first update the package lists to fetch information about the latest available versions of packages from the repositories. Then, it will proceed to upgrade the installed packages to the latest available versions without user intervention. This is a common practice to ensure that your system stays up-to-date with the latest security patches and bug fixes.s

2) sudo apt install mysql-server

to start mysql server in ubuntu after installation :

--> sudo mysql

To create the database –

CREATE DATABASE DB1;

To show all the databases –

SHOW DATABASES;

To change the database –

USE DB1;

To check the current database –

SELECT DATABASE();

To create table in database –

CREATE TABLE EMP(

   -> id INT PRIMARY KEY,

   -> name VARCHAR(15),

   -> age INT);

To insert the record in table –

mysql> INSERT INTO EMP(id,name,age)VALUES(101,'Raj',25);

Query OK, 1 row affected (0.02 sec)

To select the data from the table -

mysql> SELECT name FROM EMP;

+------+

| name |

+------+

| Raj |

+------+

1 row in set (0.00 sec)

mysql> SELECT id, name FROM EMP;

+-----+------+

| id | name |

+-----+------+

| 101 | Raj |

+-----+------+

1 row in set (0.00 sec)

To show the tables -

mysql> SHOW TABLES;

SHOW TABLES;

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mysql> SHOW TABLES;

+---------------+

| Tables\_in\_DB1 |

+---------------+

| EMP |

+---------------+

1 row in set (0.00 sec)

mysql> show tables;

+---------------+

| Tables\_in\_DB1 |

+---------------+

| EMP |

+---------------+

1 row in set (0.00 sec)

To describe table -

mysql> DESCRIBE EMP;

+-------+-------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-------+-------------+------+-----+---------+-------+

| id | int | NO | PRI | NULL | |

| name | varchar(15) | YES | | NULL | |

| age | int | YES | | NULL | |

+-------+-------------+------+-----+---------+-------+

3 rows in set (0.00 sec)

To update the data of the table -

mysql> UPDATE EMP

-> SET id=12, name='Vidhi'

-> WHERE id=102;

Query OK, 1 row affected (0.02 sec)

Rows matched: 1 Changed: 1 Warnings: 0

To see the content of the table -

 mysql> SELECT \* FROM EMP;

+-----+-------+------+

| id | name | age |

+-----+-------+------+

| 12 | Vidhi | 20 |

| 101 | Ravi | 25 |

+-----+-------+------+

2 rows in set (0.00 sec)

To delete the record from the table -

 mysql> DELETE FROM EMP WHERE name='Radha';

Query OK, 1 row affected (0.05 sec)

Add a new column in the table -

mysql> ALTER TABLE EMP

-> ADD dept VARCHAR(15);

Query OK, 0 rows affected (0.35 sec)

Records: 0 Duplicates: 0 Warnings: 0

Set the value of added column by using the update command –

mysql> UPDATE EMP SET dept='IT' WHERE id=102;

Query OK, 1 row affected (0.02 sec)

Rows matched: 1 Changed: 1 Warnings: 0

Rename the name of the table -

mysql> RENAME TABLE EMP TO EMPL;

Query OK, 0 rows affected (0.09 sec)

Alter column of the table -

Limiting the number of rows in a table -

Sorting the data -

To count no of rows in a table -

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To get the help of the command –

Syntax – HELP command name;

To select the version of mysql server -

Adding a foreign key to a table -

Primary key constraint -

Creating a backup –

Syntax –

mysqldump -u username -p database\_name >backupfile.sql

This command will prompt us to enter the password for the specified user. Then it will create a sql dump file(backuupfile.sql) containing the structure & data of the database.

example –

mysqldump -u root -p DB1 >backupfile.sql

Restoring from a backup –

To restore a database from a backup file using the mysql command.

Syntax –

mysql -u uername -p databasename <backupfile.sql

Joing 2 tables -

To join rows from multiple tables based on a related column, use the given command

Syntax -

Select column1,column2

From table1 join table2

On table1.column=table2.column;

Creating a new database user –

CREATE USER ‘username’@’localhost’ IDENTIFIED BY ‘password’;

Delete –

Used to delete content in rows of a table.

We can rollback the delete command.

Removes specific rows depending upon condition.

Syntax –

Delete from tablename where condition;

Drop –

Used to delete the entire content of table along with the table structure.

Cannot be rollback

Removes the entire data immediately.

Syntax –

Drop table tablename

Truncate –

Used to delete entire content of table leaving the table structure.

Cannot be rollback.

Removes all rows.

Syntax –

TRUNCATE table tablename;

Drop database –

Drop database removes the database including all its tables, triggers, stored procedures. It permenantly deletes the data from the database.

DROP DATABASE databasename;

To copy one table into another table -

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